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ABSTRACT

This study was conducted to secure adequate data to support the need for the issuance of competency certificates to graduates of Oklahoma vocational and technical education programs. A questionnaire was developed to determine the perceptions of teachers and employers regarding the competency statements and to see if using such certificates would help graduates of vocational and technical education programs to obtain full-time jobs. Data were collected through onsite visits to eight Oklahoma vocational and technical schools; the business and industry data was obtained from a mail questionnaire to 569 businesses with a return of 249 questionnaires. Some of the findings of the study were the following: (1) business and industry representatives were more supportive of the certificate as a true measure of a student's competence than were the instructors; (2) employers thought that the competency certificate would aid an employer in making employment decisions; (3) employers would use the competency certificate in making work assignments for a new employee; (4) employers indicated that the competency certificate, as written, represents the areas of major importance for vocational and technical programs; (5) employers thought the certificate was clearly defined, whereas teachers thought the certificate needed clarification; and (6) both groups thought the rating scale on the competency certificate was appropriate. Recommendations were made to increase teacher acceptance and use of the competency certificate, especially in light of business and industry's favorable response to it. (KC)

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PERCEPTIONS OF THE USEFULNESS OF COMPETENCY CERTIFICATES BY VOCATIONAL AND TECHNICAL INSTRUCTORS AND BUSINESS AND INDUSTRY RESPONDENTS

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Chapter 1

INTRODUCTION

The credibility of our nation's educational system is being threatened. Public education is under tremendous pressure to strive for excellence. This pursuit of excellence has placed much emphasis on the development of basic skills and competency-based education.

Vocational and technical education, in its search for excellence, is striving to develop programs that will be better able to meet the learning needs of individual students through competency-based vocational education. Competency-based vocational education is an instructional system in which minimum standards are established, before performing specific occupations, related to knowledge, skills, and attitudes. Competency-based vocational education programs and management systems are being developed nation-wide to concentrate on monitoring individual student performance levels against objectives and standards established by both educators and representatives of business and industry.[1]

The State of Oklahoma developed such a management system in 1979. An evaluation of the system was needed at this time to determine if the system was both useful to instructors and effective in helping graduates

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[1]Consortium of Employment for Education, Quality Assurance in the Preparation of Youth for Work, (Washington, DC: 1981), p. iii.

of vocational and technical education programs obtain employment. A further purpose of this study was to determine if the system was in need of revision.

Statement of the Problem

The State of Oklahoma has 168,700 students currently enrolled in vocational and technical education programs.[2] In 1982, 54.22 percent of the 1981-82 school-year graduates from vocational and technical education programs received employment in related and unrelated occupations.[3] Today's societal and economic conditions create a competitive environment for full-time employment. If graduates of vocational and technical education programs were issued competency certificates which document the achieved level of performance in regard to specific competencies, would they have an advantage in the job market?

Significance of the Study

During the year 1979, the Curriculum and Instructional Materials Center (CIMC) of the Oklahoma State Department of Vocational and Technical Education began development of competency certificates. The competency certificates, which can be used to document the student's achieved level of performance on specific competencies, were to be issued to students upon completion of a training program. Oklahoma area vocational and technical school instructors have not readily accepted the usefulness of the competency certificates. In order to obtain more positive reactions

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[2]Oklahoma State Department of Vo-Tech, "Information of Vocational and Technical Education: School Year 1983-84," (Stillwater, Oklahoma: Oklahoma State Department of Vo-Tech, 1984). (Pamphlet.)

[3]Oklahoma State Department of Vocational Technical Education, 1983 Accountability Report and 1985 State Plan, 1984, Sec. 4, p. 17.

toward and increased use of the competency certificates, it was necessary for a study to document both instructors' and business and industry representatives' reactions to the competency certificates.

Purpose of the Study

The major purpose of this study was to secure adequate data to support the need for the issuance of the competency certificates to graduates of vocational and technical education programs. In order to secure the data, the following objectives were established:

1. To ascertain by business and industry standards, if the competency certificates would aid graduates of vocational and technical education programs in obtaining full-time employment;
2. To ascertain the perception of competency certificates by specific types of industry;
3. To ascertain the perception of competency certificates by vocational and technical education instructors;
4. To ascertain if revisions need to be made in the competency certificate.

Procedure

An intensive and extensive review of the available pertinent literature was conducted. Information gained from the review of literature and personal interviews with the Coordinator of the Curriculum and Instructional Materials Center of the Oklahoma State Department of Vocational and Technical Education, provided the basis for the development of a survey instrument (a questionnaire). The questionnaire was

administered to a select sample of vocational and technical education instructors from eight northeast Oklahoma area vocational and technical schools and business and industry representatives serving on advisory committees for the selected schools. This researcher collected data from instructors through on-site visits to the area vocational and technical schools. The questionnaire was mailed to business and industry representatives. A follow-up letter was mailed two weeks after the initial mailing to encourage the business and industry representatives to respond to the questionnaire. Results from the tabulationa and analysis of responses to the questionnaire were used to test the hypothesis.

Assumptions and Limitations

The basis of this study was limited to an in-depth review of the available pertinent literature to be found in the John Vaughan Library located on the campus of Northeastern State University at Tahlequah, Oklahoma; the Edmon Low Library located on the campus of Oklahoma State University at Stillwater, Oklahoma; and the Curriculum Library of the Oklahoma State Department of Vocational and Technical Education at Stillwater, Oklahoma. An ERIC search presented the researcher with additional literature for review. The study was limited to the administration of a questionnaire to a select sample of one hundred twelve vocational and technical education instructors from eight northeast Oklahoma area vocational and technical schools and five hundred sixty-nine business and industry representatives serving on advisory committees for the selected schools.

For the purpose of the study, the researcher assumed:

1. That the selected sample of instructors from the eight northeast Oklahoma area vocational and technical schools

would be representative of the instructors from the twenty-seven area vocational and technical districts in Oklahoma.

2. That the selected sample of business and industry would be representative of the general business and industry populace.
3. That instructors and business and industry representatives would accurately evaluate the effectiveness of the competency certificates.
4. That any additional comments provided, either positive or negative, by the instructors or the business and industry representatives, could prove useful in the revision of the competency certificate.

Hypothesis

If graduates of vocational and technical education programs were issued competency certificates, which document the achieved level of performance in regard to specific competencies, they would have an advantage in the job market. A second hypothesis is that representatives of business and industry will find the use of the competency certificates more useful in helping vocational and technical education graduates find employment than will the instructors of vocational and technical education.

Definition of Terms

Competency-Based Vocational Education (CBVE). An instructional system in which minimum standards are established, before performing a specified occupation, related to knowledge, skills, and attitudes.

Program. Broad area of education for which instruction is planned; also called program of study.

Occupation. Composite of jobs performed by an individual for employment on a regular basis.

Job. Composite of duties and tasks performed regularly in one's trade, occupation, or profession.

Task. Measurable element of work usually performed by a single worker in a short span of time.

Competency. Ability to complete a specific task at an acceptable level of performance.

Standard. Level of performance specified as a guide for evaluating a learner's achievement.

Spin-off. Level of training at which a learner is employable; also called "sub-occupation".

Individualized instruction. Learner-centered instruction in which materials and activities are tailored to meet the needs of individual learners.

Controlled entry/open exit. Scheduling system that allows learners to enter or re-enter training programs at specific times and to leave at any time.

Job ready. Minimum competency level(s) required of a beginning worker for immediate productivity upon entering an occupation.

Instructional materials. Means through which information is presented within a classroom.

Core content. Groups of instructional units common to all jobs in an occupation.

Advisory committee. Selected group of business and industry representatives who advise an instructor on program objectives and instructional content.

Competency certificate. A certificate issued to a student upon completion of vocational and technical education training program. Certificate documents student's achieved level of performance in regard to specified competencies.

Chapter 2

REVIEW OF THE LITERATURE

Today's societal and economic conditions create a competitive environment for employment. This competitive environment has made it necessary for vocational and technical education to search for every avenue available to demonstrate that graduates of vocational and technical (Vo-Tech) programs have developed the competencies necessary to succeed in the world of work. One such avenue is competency-based vocational education (CBVE). CBVE has created the "potential for raising the image of vocational eduation from a 'catch-all' for the student who is not college bound to one of 'know how' in the occupational world."[4] The use of CBVE could give the advantage to graduates of vocational and technical education in obtaining and retaining employment.[5]

What is Competency-Based Vocational Education?

Competency-based vocational education is an occupational program in which competencies and performance standards are established before the instructional process begins. These competencies and standards are

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[4]Aleene A. Cross, "Putting Competency-Based Instruction in Perspective," Vocational Instruction, 1980 Yearbook of the American Vocational Association, (Arlington, Virginia: The American Vocational Association, Inc., 1979), pp. 71-72.

[5]Statement by Bob Patton, personal interview, May 29, 1984.

validated by business and industry. "It is an instructional process aimed at improving the teaching-learning process."[6] While employability depends on several factors, the most important factor in retaining employment is an employee's ability to perform the tasks necessary for a particular job. For this reason, CBVE becomes a very important tool in preparing students for employment. CBVE is based on:

1. Specifying job-related tasks, validated by business and industry, prior to instruction;
2. Providing instruction for specific job-related tasks; and
3. Measuring and certifying student performance on tasks.[7]

Certification and CBVE

One of the major factors of competency-based vocational education is the documentation of student competencies. The State of Oklahoma, under the leadership of Bob Patton, Coordinator of the Curriculum and Instructional Materials Center of the Oklahoma State Department of Vocational and Technical Education, developed a competency-based system teachers could used to document student competencies. The system is referred to as a Competency Profile with Competency Certificate.

The competency profile is a file folder that lists the competencies a student should master while enrolled in a vo-tech program. An integral part of the profile is the competency certificate. The competency certificate lists the major areas of instruction. The certificate

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[6]Maryland State Department of Education, "What is Competency-Based Vocational Education (CBVE)?" (Cresaptown, Maryland: Western Maryland Vocational Resource Center, 1978), p. 3. (Pamphlet.)

[7]Oliver J. Dale, "Measuring Student Competencies," American Vocational Journal, (January, 1978), p. 48. ERIC EJ 175 167.

is designed to be issued to student leaving or completing a vo-tech training program.[8]

Patton states, "the competency certificate, if used correctly, should do more to improve the working relationship between local educational agencies and business and industry than anything that has been developed in the past twenty years."[9] Presently, there are forty-five competency profiles and competency certificates developed for vo-tech training programs. The certificate reveals what the student has studied and the achieved competency levels. Patton believes that "the competency certificate provides business and industry with fingertip information that is of quality and very usable in aiding them in the decision as to whether or not to employ a vocational student."[10]

Research done by Nelson and Ujakowich showed that employers will use whatever signals or measures about the competency of applicants they can find to reduce uncertainty in the employment process.[11] The same study revealed the "certification of competency plays a smaller role than it should due to the ambiguity to most certificates."[12] Most certificates, unlike the ones developed by the State of Oklahoma, "indicate completion of a program or passage of a test and nothing more."[13] A certificate should be an important indicator to employers, students,

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[8]Patton, loc. cit.

[9]Ibid.

[10]Ibid.

[11]Valerie J. Nelson and Roberta A. Ujakowich, "Existing Certificates and a Proposal for CETA. Final Report, September 1979 through February 1980," Office of the Assistant Secretary for Policy, Evaluation and Research, p. 5, ERIC ED 194 815.

[12]Ibid, p. 3.

[13]Ibid, p. 50.

schools, and consumers which facilitates hiring, promotions, encourages youths to invest time in training programs and coordinates and controls performance of both teachers and students. A certificate should be a guarantee of quality.[14]

Competency-based vocational education programs should include competency certification to aid in fulfillment of the basic mission of vocational education--preparing individuals who enroll in vocational training programs for employment with business and industry. "Business and industry deserves the right to know what our students can and can not do. The results of the competency certificates should be used in communication with these groups. Hopefully, industry will accept and support these standards by employing our students. Our growth in vocational and technical education will depend on how well we perform and how well we train our people. The competency certificates could be or can be that standard."[15]

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[14] Ibid, pp. 15-16.

[15] Patton, loc. cit.

Chapter 3

METHODOLOGY

Introduction

The major purpose of this study was to secure adequate data to support the need for the issuance of the competency certificates to graduates of vocational and technical education programs. In order to secure the data, the following objectives were established:

1. To ascertain, by business and industry standards, if the competency certificates would aid graduates of vocational and technical education programs in obtaining full-time employment;
2. To ascertain the perception of the competency certificates by specific types of industry;
3. To ascertain the perception of the competency certificates by vocational and technical education instructors; and
4. To ascertain if revisions need to be made in the competency certificates.

This chapter will include the following areas: (1) selection of the population; (2) development of the instrument; and (3) method of collecting the data.

Selection of the Population

Vocational and technical education programs in Oklahoma are carried out in twenty-seven area vocational and technical school (AVTS) districts and numerous comprehensive high schools. After consultation with officials of the Oklahoma State Department of Vocational and Technical Education, the decision was made to conduct this study using a sample of instructors and program advisory committee members from eight AVTS campuses. The AVTS campuses selected were:

1. Tulsa County AVTS - Memorial Campus
2. Tulsa County AVTS - North Peoria Campus
3. Tulsa County AVTS - Southeast Campus
4. Central Oklahoma AVTS - Drumright Campus
5. Central Oklahoma AVTS - Sapulpa Campus
6. Northeast Oklahoma AVTS - Pryor Campus
7. Northeast Oklahoma AVTS - Afton Campus
8. Bill Willis Skill Center - Tahlequah

In order to secure the sample, officials of the Oklahoma State Department of Vocational and Technical Education mailed a letter requesting participation in the study to the superintendents of the eight selected area vocational and technical schools (Appendix A).

The business and industry sample was derived from the program advisory committee members of the eight selected area vocational and technical schools.

Development of the Instrument

An ERIC search revealed only twenty-seven works related to student certification and vocational education. Therefore, the development of the survey instrument was based upon personal interviews and correspondence

(Appendix A) with the following officials of the Oklahoma State Department of Vocational and Technical Education:

Bob Patton, Coordinator, Curriculum and Instructional Materials Center (CIMC)

Greg Pierce, Assistant Coordinator, CIMC

Joyce Sawatsky, Assistant Coordinator, CIMC

Nelda Bloom, Curriculum Specialist, CIMC

Keith Harp, Curriculum Specialist, CIMC

Donna Kates, Curriculum Specialist, CIMC

Dr. Don Frazier, Coordinator, Research

Objectives for the study were established from the interviews and correspondence with the Oklahoma State Department of Vocational and Technical Education officials. Questions for the survey instrument (a questionnaire) were based on the established objectives. Prior to the implementation of the survey instrument, the questionnaire was revised and approved by the Coordinator of the Curriculum and Instructional Materials Center; the Coordinator of Research; and the researcher. The questionnaire consisted of two parts. Part I was for the purpose of determining the usefulness and effectiveness of the competency certificate. Part II was for the purpose of determining if revisions need to be made in the competency certificates.

Collection of the Data

The vocational and technical education instructor sample was obtained through on-site visits to each of the selected area vocational and technical schools (AVTS). The contact person at each AVTS was contacted by telephone to make arrangements for the visit. A letter of confirmation with a list of the programs that needed instructor

representation (Appendix A) was then mailed to each contact person. During the on-site visit, each instructor was given a questionnaire and a competency certificate for the program in which they taught. The instructor was asked to reply to Part I of the questionnaire from an employee's point of view and to Part II of the questionnaire from the instructor's own point of view.

The business and industry sample was derived from a compilation of the program advisory committee members of eight selected area vocational and technical schools. Each AVTS provided the researcher with a list of program advisory committee members. Each committee member was mailed a packet of materials which included two introductory letters, one from the Oklahoma State Department of Vocational and Technical Education and one from the researcher; a questionnaire; competency certificate; and a stamped, self-addressed envelope. The business and industry representatives were asked to complete the questionnaire and return it in the stamped, self-addressed envelope. Two weeks after the initial mailing, a follow-up letter was mailed to the five hundred sixty-nine businss and industry representatives to encourage them to respond to the questionnaire.

CHI square was used for the statistical analyses; .05 was established as the level of significance.

Chapter 4

PRESENTATION AND ANALYSIS OF THE DATA

The major purpose of this study was to secure adequate data to support the need for the issuance of the competency certificates to graduates of vocational and technical education programs. In order to secure the data, the following objectives were established:

1. To ascertain, by business and industry standards, if the competency certificates would aide graduates of vocational and technical education programs in obtaining full-time employment;
2. To ascertain the perception of the competency certificates by specific types of industry;
3. To ascertain the perception of the competency certificates by vocational and technical education instructors; and
4. To ascertain if revisions need to be made in the competency certificates.

The data presented in this chapter was gathered from one hundred-twelve vocational and technical education instructors teaching in eight selected northeast Oklahoma area vocational and technical schools and two hundred forty-nine business and industry representatives serving on program advisory committees for the eight selected schools.

The instructor sample was gathered through on-site visits to each of the eight selected schools. Questionnaires were mailed to five hundred sixty-nine business and industry representatives. From the five hundred sixty-nine business and industry representatives mailed questionnaires, two hundred forty-nine responded before the deadline; eighteen responded after the deadline; and sixteen were returned for insufficient addresses. Returned questionnaires were collected and the data analyzed and summarized.

A Liekert-type scale was used for the data collection of Part I of the questionnaire. Each response was assigned a numerical value: Strongly Agree - 5; Agree - 4; Neutral - 3; Disagree - 2; and Strongly Disagree - 1. It was assumed that the actual numerical value range for each response category would be as follows: Strongly Agree - 4.6 to 5.0; Agree 3.6 to 4.5; Neutral - 2.6 to 3.5; Disagree - 1.6 to 2.5; and Strongly Disagree 1.5 and below.

During the analysis process, the researcher determined, using a CHI^2 comparison, that the experience of the instructor had no effect on the instructor's responses to the questionnaire. It was also determined that the responses made by the business and industry representatives were not affected by prior knowledge of the competency certificate or by whether or not the business and industry representatives had employed graduates of vocational and technical education programs.

Tables 1 through 10 will present, by question, a comparison of the expected and observed frequency of the business and industry sample to the instructor sample. Table 1 denotes the comparison of the business and industry sample expected frequency and observed frequency of responses to those of the instructor sample in relationship to Item one on the questionnaire: Vocational instructors should be held accountable for

documentation. However, it should be noted that ninety percent of the business and industry sample, compared to seventy-three percent of the instructor sample, either agreed or strongly agreed. The expected frequency of response for strongly agree from the business and industry sample was 81.5 with an observed frequency of 97; the expected frequency for disagree was 20.5 with an observed frequency of 10. The instructor sample was not as positive as the business and industry sample. The expected frequency of response for the strongly agree category from the instructor sample was 37.5 with an observed frequency of 22; the expected frequency for disagree was 9.5 with an observed frequency of 20. CHI Square value was significant at 0.00 value.

Table 1

Comparison of Expected and Observed Frequency in Relationship To Instructors' Accountability for Documentation

	Instructors		Business and Industry		
Responses	EF	OF	EF	OF	
Strongly Disagree	1.3	2	2.7	2	
Disagree	9.5	20	20.5	10	
Neutral	6.3	8	13.7	12	
Agree	57.4	60	124.6	122	
Strongly Agree	37.5	22	81.5	97	
CHI Square					27.99
P					0.00

A summary of Table 2 shows that ninety percent of the business and industry sample and eighty-three percent of the instructor sample felt that the competency certificate would aid the employer in making a decision in regard to which applicant to employee. The greatest differences between the expected frequency and the observed frequency in both the instructor sample and the business and industry sample were in the neutral and agree categories. The expected frequency of the instructor sample for the neutral category was 5.3 with an observed frequency of 10; the expected frequency for the agree category was 65.1 with an observed frequency of 60. The business and industry sample expected frequency for the neutral category was 11.7 with an observed frequency of 7; the expected frequency for agree was 141.9 with an observed frequency of 147. Even though both sample groups were positive toward the usefulness of the certificate for the purpose of aiding an employer in the decision as to which applicant to hire, the business and industry sample was more positive than expected and the instructor sample more negative than expected. CHI Square value was significant at 0.04 value.

Table 2

Comparison of Expected and Observed Frequency in Relationship to the Usefulness of Certificate in Aiding Employer in Hiring

	Instructors		Business and Industry		
Responses	EF	OF	EF	OF	
Strongly Disagree	1.6	0	3.4	5	
Disagree	6.6	9	14.4	12	
Neutral	5.3	10	11.7	7	
Agree	65.1	60	141.9	147	
Strongly Agree	32.4	32	70.6	71	
CHI Square					10.06
P					0.04

There was a large discrepancy in all categories between the expected frequency of responses and the observed frequency of responses in relationship to question three as shown by Table 3. The business and industry sample felt that it was more important to know an applicant's degree of proficiency than did the instructors. However, it should be noted that ninety-eight percent of the business and industry sample and ninety percent of the instructor sample either agreed or strongly agreed that an employer needs to know an applicant's degree of proficiency. The business and industry sample observed frequency of response was greater in the strongly agree and lower in the agree categories than the expected frequency, while the instructor sample observed frequency was lower in the strongly agree category and higher in the agree category than the expected

frequency. The expected frequency of the business and industry sample for the strongly agree category was 116.5 with an observed frequency of 133. Expected frequency for the agree category was 117.9 with an observed frequency of 107. The instructor sample expected frequency for agree was 54.1 with an observed frequency of 65; the expected frequency for strongly agree was 53.5 with an observed frequency of 37. CHI Square value was significant at 0.00 value.

Table 3

Comparison of Expected and Observed Frequency in Relationship to the Importance of Knowing an Applicant's Degree of Proficiency

	Instructors		Business and Industry		
Responses	EF	OF	EF	OF	
Disagree	4.4	10	9.6	4	
Agree	54.1	65	117.9	107	
Strongly Agree	53.5	37	116.5	113	
CHI Square					20.97
P					0.00

There was basically no significance between the responses of the instructor sample and business and industry sample for question four. By comparing the expected frequency and observed frequency, the business and industry sample was more positive toward the usefulness of the certificate in using the recorded competencies to determine a new employee's starting salary (Table 4). It should be noted that the instructor sample expected frequency in the disagree category was 19.9 with an observed frequency of

29, while the business and industry sample expected frequency was 43.1 with an observed frequency of 34. CHI Square value was not significant at 0.08.

Table 4

Comparison of Expected and Observed Frequency in Relationship to the Certificate Usefulness in Establishing a Starting Salary

	Instructors		Business and Industry		
Responses	EF	OF	EF	OF	
Strongly Disagree	5.4	4	12.3	14	
Disagree	19.9	29	43.1	34	
Neutral	27.5	24	59.5	63	
Agree	48.7	47	105.3	107	
Strongly Agree	10.1	8	21.9	24	
CHI Square					8.17
P					0.08

As shown in Table 5, the instructor sample and business and industry sample differ as to whether or not the competency certificate would affect a new employee's work assignment. The expected frequency of business and industry for the strongly agree category was 32.2 with an observed frequency of 36; the expected frequency for the agree category was 143.1 with an observed frequency of 148. The instructor sample observed frequency was more than the expected frequency in the strongly agree and agree categories. The instructor sample expected frequency for agree was 65.9 with an observed frequency of 61; the expected frequency for strongly

agree was 14.8 with an observed frequency of 11. Using the observed frequency, seventy-five percent of the business and industry sample compared to sixty-four percent of the instructor sample, felt that the competency certificate would affect a new employee's work assignment. CHI Square value was not significant at 0.11.

Table 5

Comparison of Expected and Observed Frequency in Relationship To a New Employee's Work Assignment

	Instructors		Business and Industry		
Responses	EF	OF	EF	OF	
Strongly Disagree	3.5	4	7.5	7	
Disagree	13.9	21	30.1	23	
Neutral	13.9	15	30.1	29	
Agree	65.9	61	143.1	148	
Strongly Agree	14.8	11	32.2	36	
CHI Square					7.56
P					0.11

There was a significant difference between the business and industry sample and the instructor sample in regard to the usefulness of the competency certificate for the purpose of aiding employers in placing new employees into in-plant training programs. The business and industry sample was more positive toward the certificate's usefulness for this purpose than was expected, with the instructor sample exhibiting a more negative attitude than was expected. The observed frequency in the agree and strongly agree categories for the business and industry sample was

higher than the expected frequency while the observed frequency for the instructor sample in the same categories were lower than the expected frequency (Table 6). CHI Square value was not significant at 0.42.

Table 6

Comparison of Expected and Observed Frequency in Relationship to In-Plant Training Programs

	Instructors		Business and Industry		
Responses	EF	OF	EF	OF	
Strongly Disagree	3.1	6	6.9	4	
Disagree	19.2	26	41.8	35	
Neutral	20.1	18	43.9	46	
Agree	58.1	54	126.9	131	
Strongly Agree	9.4	6	20.6	24	
CHI Square					9.90
P					0.42

Using Table 7 to compare the expected frequency and observed frequency of the business and industry sample and the instructor sample, it should be noted that there is a significant difference of opinion as to whether or not the competency certificate adequately reveals the qualifications of an applicant. Once again, the business and industry sample was more positive than the instructor sample. Sixty-one percent of the business and industry sample either agreed or strongly agreed that the certificate adequately reveals an applicant's qualifications. Only fifty-six percent of the business and industry sample was expected to

exhibit a positive reaction. It was expected that fifty-six percent of the instructor sample would have a positive response; in actuality, only forty-five percent of the instructors responded in a positive manner. CHI Square value was significant at 0.01.

Table 7

Comparison of Expected and Observed Frequency in Relationship to Job Qualifications

	Instructors		Business and Industry		
Responses	EF	OF	EF	OF	
Strongly Disagree	4.7	7	10.3	8	
Disagree	27.1	38	58.9	48	
Neutral	17.7	17	38.3	39	
Agree	53.9	47	117.1	124	
Strongly Agree	8.5	3	18.5	24	
CHI Square					14.51
P					0.01

Seventy-five percent of the business and industry sample, compared to fifty-eight percent of the instructor sample, believed the competencies listed on the competency certificate could be adequately measured by the instructor. The expected frequency for the agree category from the business and industry sample was 149.6 with an observed frequency of 160. The expected frequency for the agree category from the instructor sample was 68.4 with an observed frequency of 58. (Table 8.) CHI Square value was significant at 0.00.

Table 8

Comparison of Expected and Observed Frequency in Relationship to Instructor's Ability to Measure Competencies Listed on Certificate

	Instructors		Business and Industry		
Responses	EF	OF	EF	OF	
Strongly Disagree	2.2	5	4.8	2	
Disagree	13.8	23	30.2	21	
Neutral	17.2	18	37.8	37	
Agree	68.4	58	149.6	160	
Strongly Agree	9.4	7	20.6	23	
CHI Square					17.39
P					0.00

Seventy-three percent of the business and industry sample, compared to fifty-three percent of the instructor sample, believed that it is important for the instructors to issue competency certificates for the purpose of aiding students in obtaining full-time job placement. Table 9 shows the expected frequency for the agree category for the business and industry sample was 120.8 with an observed frequency of 129; the expected frequency for strongly agree was 42.5 with an observed frequency of 50. The instructor sample was more negative than was expected. The expected frequency for the instructor sample for the agree category was 55.2 with an observed frequency of 47; the expected frequency for the strongly agree category was 19.5 with an observed frequency of 12. CHI Square value was significant at 0.00.

Table 9

Comparison of Expected and Observed Frequency in Relationship to the Importance of the Certificate in Obtaining Full-Time Employment

	Instructors		Business and Industry		
Responses	EF	OF	EF	OF	
Strongly Disagree	4.1	6	8.9	7	
Disagree	12.2	21	26.8	18	
Neutral	21.0	26	46.0	41	
Agree	55.2	47	120.8	129	
Strongly Agree	19.5	12	42.5	50	
CHI Square					18.12
P					0.00

Eighty-two percent of the business and industry sample either agreed or strongly agreed that the competency certificate would aid them in the selection of qualified personnel. Only fifty-nine percent of the instructors either agreed or strongly agreed. The business and industry sample was more positive than expected and the instructor sample was more negative than expected. The expected frequency for the agree category for the business and industry sample was 142.7 with an observed frequency of 152; the expected frequency for strongly agree was 41.2 with an observed frequency of 49. The observed frequency from the instructor sample for agree and strongly agree was 56 and 11 respectively, with expected frequency of 65.3 and 18.8 respectively (Table 10). CHI Square value was significant at 0.00.

Table 10

Comparison of Expected and Observed Frequency for Business and Industry Sample and Instructor Sample in Relationship to the Certificate Aiding in the Selection of Qualified Personnel

	Instructors		Business and Industry		
Responses	EF	OF	EF	OF	
Strongly Disagree	2.5	2	5.5	6	
Disagree	11.9	19	26.1	29	
Neutral	13.5	24	29.5	19	
Agree	65.3	56	142.7	152	
Strongly Agree	18.8	11	41.2	49	
CHI Square					24.85
P					0.00

In the overall comparison of the attitude of the business and industry sample to the additude of the instructor sample, it was evident that the business and industry sample was more positive toward the usefulness of the competency certificate than the instructor sample. Seven of the ten CHI^2 mean were significant at the 0.05 level. It should be noted that all questions except questions four, five, and six had significance factors below 0.05 (Tables 1 - 10). This was due to the more positive attitude of the business and industry sample. There was no significance between the attitudes of the business and industry sample and the instructor sample on Items four, five, and six.

Table 11 is a CHI Square comparison of the business and industry sample to the instructor sample by program types. There was no significant differences between the two samples in the business areas or the service area. Overall, both the business and industry sample and the instructor sample for both the business and service areas were positive. There were several areas of significance in the construction area and the automotive and electronic area. A significant difference was found in questions one, two, five, nine, and ten of the construction area. Questions one, three, five, nine, and ten show a significance factor below 0.05 and question two had a significance factor of 0.0089 using Fisher's Exact Probability. In all five questions, the business and industry sample was more positive than the instructor sample. The business and industry sample demonstrated a significantly more positive reaction toward holding an instructor accountable for documentation of student competencies than did the instructors. The business and industry sample also showed a more positive attitude, than the instructors', toward the usefulness of competency certificates in the following: (1) Aiding the student in obtaining full-time placement; (2) giving an applicant the advantage in obtaining employment; (3) affecting a new employee's work assignment; and (4) aiding the employer in the selection of qualified personnel.

There were six questions in the automotive and electronic area that had a significance factor of 0.05 or lower. They were questions one, three, six, seven, eight, nine, and ten. Once again, the business and industry sample was more positive than the instructor sample. The business and industry sample was more positive than the instructor sample. The business and industry sample revealed a significantly more positive

Table 11

Overall CHI^2 Comparison of Business and Industry to Vocational Instructors

Questions	Business		Construction		Auto & Elec.		Service	
	CHI^2	P	CHI^2	P	CHI^2	P	CHI^2	P
1. Instructors should be held accountable for documentation of student competencies.	0.00	1.00	10.60	0.00 **	9.92	0.00 **	0.04	0.52
2. The certificate gives a student an advantage in obtaining employment.	0.01	0.90	NA	0.0089 **	0.90	0.34	0.00	0.95
3. Employers need to know the degree of an applicant's proficiency.	0.00	1.00	1.83	0.17	NA	0.05 **	1.12	0.28
4. I would consider the certificate when establishing salary for a new employee.	0.00	1.00	0.81	0.37	1.63	0.20	0.39	0.53
5. The certificate would affect the work assignment of a new employee.	0.07	0.78	5.93	0.01 **	3.53	0.06	0.00	1.00
6. The certificate provides sufficient information for in-plant training programs.	1.10	0.30	1.22	0.27	11.04	0.00 **	0.10	0.75
7. The certificate reveals sufficient information of job qualifications.	0.49	0.48	1.01	0.31	7.08	0.00 **	0.00	1.00
8. Items listed on the certificate can be adequately measured by the instructors.	0.56	0.45	0.63	0.43	7.29	0.00 **	0.80	0.36
9. Instructors should issue certificates to aid students in obtaining employment.	2.91	0.90	18.33	0.00 **	6.20	0.01 **	0.66	0.41
10. Instructors should issue certificates to help employers select qualfied personnel.	3.22	0.07	13.71	0.00 **	7.67	0.00 **	NA	0.243

NA - Fisher's Exact Probability
** - Significance Factor .01 and below

toward the usefulness of the competency certificate in regard to the following statements:

1. The competency certificate provides adequate information for placing an employee into in-plant training programs;
2. The competency certificate provides sufficient information to reveal the job qualifications of an applicant;
3. Items listed on the competency certificate can be adequately measured by an instructor;
4. It is important for instructors to issue competency certificates for the purpose of aiding students in obtaining full-time job placement; and
5. It is important for instructors to issue competency certificates for the purpose of aiding employers in the selection of qualified personnel.

There was also a significant difference of opinion between the two samples as to whether instructors should be held accountable for documentation of student competencies.

Table 12 exhibits the results of Part II of the questionnaire. Part II of the questionnaire was to determine if the competency certificate needed to be revised. There was a significance factor of 0.00 between the business and industry sample and the instructor sample on all questions. The business and industry sample was more positive toward the certificate in its present form (Appendix B) than was the instructor sample. The business and industry sample indicated that two changes should be made in the certificate; the instructor sample indicated that only one change should be made. Both samples exhibited a need for the certificate to accommodate a record of on-the-job training. The business

and industry sample, 61.8 percent, indicated that the competency certificate should specity both program content and occupations for which the student was trained.

Additional Comments

Following are some interesting comments about the competency certificates as revealed by vocational and technical instructors and business and industry representatives.

Vocational and Technical Instructor comments:

"Where do you show following orders, taking orders, and getting along with people?"

"List student competency in areas of: Human Relations, Communications, and Advertising."

"I think the employer should speak with the instructor personally even though a competency certificate is provided."

"Place on the document an area for OJT (on-the-job training) during the school year and add a description of this work."

"It was made a requirement last year by the administration, but I think they are a good idea. They tell the employer some things about the student."

"Some of my students go to the military. Many have gained one full step in rank due to a competency certificate."

"The certificate has been requested by employers to identify actual skills the student has."

"The employers in our area are most impressed and the students realize the accomplishments they have made and how they compare to other applicants to a greater degree."

"They provide the student with some accomplishments she/he has mastered to better help them in securing a career."

"Filling out the certificate makes the instructor seriously consider each student's abilities and limitations in an overall capacity and specific capacities."

"I feel they are an asset to my program just as much as the reward a student feels after accomplishing a task in the classroom."

Business and Industry Representatives comments:

"The certificate focuses only on skills and aptitudes; what about behavior, creativity, and ability to work with others?"

"This would be a good idea if the teachers evaluate the students honestly. Keeping in mind, if it says they are skilled, they should be very skilled. The reliability of the teacher is important. If an employer gets several students in with certificates and finds the evaluation on the certificate to be accurate, I think that it would make a difference in which student to hire. But, it all stems on the reliability and honesty of the teacher."

"I would hire the one with the certificate."

"Thanks for the effort to improve!"

"Of the thirty or so vo-tech grads I have interviewed in the past two years, I have yet to receive a single rating certificate."

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to secure adequate data to support the need for the issuance of the competency certificate to graduates of vocational and technical education programs. In order to secure the data, the following objectives were established:

1. To ascertain, by business and industry standards, if the competency certificates would aide graduates of vocational and technical education programs in obtaining full-time employment;
2. To ascertain the perception of the competency certificates by specific types of industry;
3. To ascertain the perception of the competency certificates by vocational and technical instructors; and
4. To ascertain if revisions need to be made in the competency certificate.

By use of a questionnaire, data was collected through on-site visits to eight selected northeast Oklahoma area vocational and technical schools and the business and industry sample was obtained through use of a mailed questionnaire. The business and industry sample was comprised of five hundred sixty-nine representatives serving on program advisory committees. There was a return of two hundred forty-nine questionnaires from the business and industry sample.

Summary of Findings

The following is a summary of the findings based on the objectives of the study:

1. There was a significant difference between the perceived value of the issuance of the competency certificates by business and industry and vocational and technical instructors.
2. Both samples supported the statement that vocational instructors should be held accountable for documentation of student abilities on specific competencies.
3. The competency certificate would aide an employer in making employment decisions.
4. The competency certificate, in its present form, would not affect the starting salary of a new employee.
5. Business and industry would use the competency certificate in making work assignments for a new employee.
6. The business and industry sample was more positive than the instructor sample in the usefulness of the competency certificate to reveal job qualifications.
7. The business and industry sample was more positive in regard to the vocational instructors' abilities to measure the competencies listed on the certificate than were the instructors.

8. The business and industry sample indicated that the competency certificate would aide them in the selections of qualified personnel.
9. The business and indsutry sample gave a more positive overall rating of the usefulness and effectiveness of the competency certificate than the vocational instructor sample.
10. Instructors from six of the eight area vocational and technical schools exhibited a positive attitude toward the usefulness of the competency certificate.
11. The construction and automotive and electronic related program areas were more positive toward the usefulness and effectiveness of the competency certificate than were the business and service related program areas.
12. There was no significant difference of opinion toward the usefulness and effectiveness of the competency certificate among the instructors in the four program areas.
13. The business and industry sample indicated that the competency certificate, as written, represents the areas of major importance for vocational and technical programs.
14. The business and industry sample found the areas listed on the competency certificate were clearly defined; whereas, the instructor sample indicated that the areas needed further clarification.

15. The business and industry sample exhibited the opinion that the competency certificate should specify the program content and occupations for which the student has been trained.
16. Analysis of the instructor sample showed an equal division of the sample in regard to the certificate specifying only program content and program content in conjunction with occupation for which the student has been trained.
17. Both samples strongly agreed that the competency certificate should indicate if the student has had on-the-job training.
18. Both samples support the rating scale on the competency certificate and feel that four rating levels are appropriate.

Conclusions

Using the data collected, the following hypotheses were accepted:

Hypotheses One: If graduates of vocational and technical education programs were issued competency certificates which document the achieved level of performance in regard to specific competencies, they would have an advantage in the job market.

Hypotheses Two: Representatives of business and industry will find the use of the competency certificates more useful in helping vocational and technical education graduates find employment than will the instructors of vocational and technical education.

The researcher further concluded that:

1. Vocational and technical education instructors are not using the competency certificates.
2. Curriculum content areas currently specified on the competency certificates are the major areas of importance.
3. The current rating scales on the competency certificates are clearly defined and adequate for rating student achievement.
4. Instructors are not as positive toward the usefulness and effectiveness of the competency certificate as business and industry.
5. The issuance of the competency certificate would give graduates of vocational and technical education programs the advantage in obtaining full-time employment.
6. The competency certificate would not affect the starting salary, but would affect the work assignment of a new employee.

Recommendations

Subsequent to the completion of this study, the researcher feels the following recommendations should be made:

1. The Curriculum and Instructional Materials Center of the Oklahoma State Department of Vocational and Technical Education should implement an intensive training program to teach instructors of vocational and technical education programs how to use the competency certificates.

2. Area vocational and technical school boards of education should formulate policies requiring that vocational and technical education instructors issue competency certificates to all completers and leavers of vocational and technical education programs.
3. The Oklahoma State Department of Vocational and Technical Education should continue to develop competency certificates for all program areas.
4. The competency certificates should be revised to accommodate a record of on-the-job training.
5. The competency certificates should be revised to reveal occupations for which the student was trained.
6. The competency certificate rating scale presently used should remain the same.
7. Further research in relationship to the competency certificate as perceived by business and industry should be conducted. The research should be diversified by using a large geographic sample.

APPENDIX A

DEVELOPMENT OF QUESTIONNAIRE AND QUESTIONNAIRE

OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION
FRANCIS TUTTLE, DIRECTOR • 1515 WEST SIXTH AVE., • STILLWATER, OKLAHOMA 74074 • A.C. (405) 377-2000

January 17, 1984

MEMORANDUM

TO: Assistant Coordinators and Curriculum Specialists

FROM: Bob Patton

SUBJECT: Research Project

We have a home economics teacher who is interested in doing a research paper on the usefulness and acceptance of the competency certificates. Basically, she would like to do a correlation study between what employers believe the advantages would be to using a competency certificate issued to vocational students on completion of a vocational and technical education training program as perceived by vocational instructors. She intends to administer the survey instrument to teachers within the Northeast Area Vocational and Technical School, Tahlequah Skill Center, Central Tech Area Vocational and Technical School, and Tulsa County Area Vocational and Technical School.

I need the following information from you. If you wanted to find information from employers and vocational teachers about the usefulness and the acceptance of the competency certificates, what questions would you ask? Please write your questions on the bottom of this memorandum and return your input to me prior to January 23.

If you have questions or need additional information, please let me know.

Thank you for your help.

BP:jd

OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION
FRANCIS TUTTLE, DIRECTOR • 1515 WEST SIXTH AVE., • STILLWATER, OKLAHOMA 74074 • A.C. (405) 377-2000

January 31, 1984

Dr. Joe Lemley, Superintendent
Tulsa-Memorial Vo-Tech Campus
3420 South Memorial
Tulsa, OK 74145

Dear Joe:

Thank you for agreeing to participate with the study on the issuance of competency certificates as perceived by employers and vocational and technical education instructors. Donna Frost, vocational home economics instructor in the Bixby Public School System, will be the researcher on this project. Donna will contact you within the next few weeks to provide you more information about this research project.

We sincerely believe that this is a very worthwhile project and I am quite certain that we will use the results of the project to improve some of the ongoing activities at the State Department of Vocational and Technical Education.

If you have questions about this research project, please let me know.

Sincerely,

Bob Patton, Coordinator
Curriculum and Instructional
Materials Center

BP/jks

cc: Donna Frost

EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER

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Competency Certificate Survey

NOA U. TECH

1. ✓ Yes, we will participate with the study.

2. ___ No, we cannot participate in the study.

3. ✓ We would like to meet with Donna Frost one afternoon after class to fill out the survey.

4. ✓ Yes, I can provide the names and addresses of advisory committee members to participate in the study.

5. ✓ We will fill out the completed survey.

6. Other comments please feel free to write to work with us:

WILLIAM D. HARTMAN

MARCH 30, 91 Bill Hartman
Signature

Curriculum Coordinator
Title

PLEASE RETURN TO:

Bob Patton, Coordinator
Curriculum and Instructional
Materials Center
150 N. 1 Seventh
Stillwater, OK 74074

February 13, 1984

Mr. Bill Hartman
Tulsa Memorial Vo-Tech Campus
3420 S. Memorial
Tulsa, OK 74145

Dear Bill:

I would like to request Monday, March 13, 1984 or Monday, March 26, 1984 from 2:30 - 3:00 p.m. as a time to visit with your staff on the Memorial campus in regard to my study on the competency certificates. I will need to meet with the teachers for the programs on the enclosed list.

I have confirmed Wednesday, February 29, 1984 from 2:30 - 3:00 p.m. as the time to visit with Dr. Allen's staff on the Peoria campus.

I will be visiting with Dr. Ellis about the study on Friday, February 24, 1984 at 2:30 p.m. At this time she will decide if she wishes to participate in the study.

I would appreciate a date confirmation as soon as possible. If you have any questions or need additional information please feel free to contact me at: (918) 366-4421 or (918) 227-4660.

Thank you.

Sincerely yours,

Donna A. Frost

Donna A. Frost

Enclosure

cc: Joe Lemley

Programs at Tulsa County Area Vocational and Technical School - Memorial Campus for which the State Department of Vo-Tech has developed competency profiles and certificates.

Business and Office

Data Processing

Food Service: Food Production, Management and Services

Health Service

Dental Assistant

Medical Assistant

Auto Body

Auto Mechanics

Residential Carpentry

Welding

Air Conditioning

Diesel Engine

Graphic Arts

Residential Plumbing

Residential Wiring

Drafting

Electronics

Bricklaying

Machine Shop

February 13, 1984

Dr. T. J. Allen
3802 N. Peoria
Tulsa, OK 74106

Dear Dr. Allen:

Thank you for agreeing to participate with my study on the acceptance and usefulness of the competency certificates. I believe the results obtained from the study will be beneficial in the full-time placement of vocational and technical education students in Oklahoma.

As indicated, in the survey returned to Bob Patton by Bill Hartman, I will need a list of your advisory committee members by programs. Please send this information to me by Friday, February 24, 1984. Send the information to:

Donna A. Frost
4430 Colonial Road
Sapulpa, OK 74066

I would like to confirm Wednesday, February 29, 1984 from 2:30 - 3:00 p.m. as the time to visit with your staff. I will need to visit with only the teachers for the programs on the enclosed list. During this time your staff will be completing a questionnaire in relation to the competency certificates.

If you have any further questions or need additional information please feel free to contact me at (918) 366-4421 or (918) 227-4660.

Thank you for your help.

Sincerely yours,

Donna A. Frost

Donna A. Frost

cc: Joe Lemley
Bill Hartman

Enclosure

Programs at Tulsa County Area Vocational and Technical School - Peoria Campus for which the State Department of Vo-Tech has developed competency profiles and certificates.

Business and Cffice

Banking

Auto Body

Auto Mechanics

Cosmetology

Small Engine Repair

Electronics

Machine Shop

APPENDIX B

MATERIALS ACCOMPANYING QUESTIONNAIRE DURING DATA GATHERING

February 27, 1984

Vocational and Technical Education Instructors:

Four years ago, the Curriculum and Instructional Materials Center with the Oklahoma State Department of Vo-Tech, started developing competency profiles and certificates for vocational and technical programs. Many schools have used the materials with great success. Business and industrial groups have been very complimentary of the profiles and certificates.

A study is now being conducted to see of the issuance of the competency certificates would increase full-time placement of vocational and technical education students. The study has been endorsed by Dr. Tuttle and is being conducted by myself, through the Curriculum and Instructional Materials Center.

Please answer the survey items as you think an employer would answer them. The survey should be returned to Dr. Ellis' office by 2:30 p.m. on Friday, March 9, 1984.

As a fellow vocational educator, I realize how limited your time is and your willingness to share it with me in this way is greatly appreciated.

If you have any questions or need additional information please feel free to contact me at:

366-4421 (school)
224-8148 (home)
227-4660 (private business)

Thank you for your help.

Sincerely yours,

Donna A. Frost

Donna A. Frost

Indian Electric Cooperative, Inc.
Phone (918) 358-2514 • • P. O. Box 49 • • CLEVELAND, OKLAHOMA 74020

March 20, 1984

Ms. Donna Frost
4430 Colonial Road
Sapulpa, Oklahoma 74066

Dear Ms. Frost:

Enclosed is the questionnaire I received and completed this morning concerning the "Competency Certificate" study.

It is good to know our Vo-Techs are planning to recognize student achievement by issuing "Competency Certificates."

In my opinion, both students and employers will benefit from this type of certificate.

As you will see from my comments on the questionnaire, the information on the reverse of the certificate will aid employers in placement of future employees. For the student, this recognition will give them additional incentive, a feeling of achievement and self confidence.

Good luck with your study. If I can be of further assistance, please give me a call.

Sincerely,

Bill Underwood
Director of Office Services

BU:ap

Enclosure

cc: Mr. Bob Patton
Oklahoma State Department of
Vocational and Technical Education
1515 West Sixth Avenue
Stillwater, Oklahoma 74074

Bill Underwood

BUSINESS AND INDUSTRY SURVEY FORM
FOR COMPETENCY CERTIFICATE EVALUATION

Company Name: Indian Electric Cooperative, Inc.

Company Type:(Manufacturing, Sales, etc.)Electric Distribution-Utility

Your Job Title: Director of Office Services

If you have employed graduates of vocational programs in the past two years, estimate how many: 6

Have you hired an employee who presented a competency certificate with his/her application? Yes

PART I
Usefulness and Effectiveness of Competency Certificates

Directions: Following are ten statements an employer might make. Please read each statement and circle the response expressing your opinion. Feel free to add any comments which would clarify your feelings about the statement.

Key to Responses:
5 = Strongly Agree
4 = Agree
3 = No Opinion
2 = Disagree
1 = Strongly Disagree

	SA	A	N	D	SD
1. Vocational instructors should be held accountable for documentation of student abilities on specific competencies: Definitely	(5)	4	3	2	1
Comments: This would be required, especially for student evaluation and counseling- also helpful to students in improving skills for job placements.					
2. If two vo-tech graduates applied for one opening in my company and all factors appeared to be equal (except that one applicant presented a competency certificate), information on the certificate would aid me in making my decision about which applicant to hire.	(5)	4	3	2	1
Comments: Documentation of the applicants skills in specific areas will definitely assist employers in selecting future employees.					
3. As an employer, it is important for me to know the degree of an applicant's proficiency in relation to a specific job.	(5)	4	3	2	1
Comments: Employers and/or personnel interviewers, are charged with the responsibility of matching the employee with the job---- If this is achieved both the employee and company benefit through productivity and job satisfaction for the employees.					

	SA	A	N	D	SD
4. I would consider the recorded competencies on the competency certificate when establishing a starting salary for a new employee.	(5)	4	3	2	1

Comments: Most employers do have formal pay scales- also companies incorporate policies that provide certain ranges in pay for additional education and/or skills.

5. The recorded competency levels on the competency certificate would affect the work assignments I make for the new employee.	(5)	4	3	2	1

Comments: As an employer I would use this information as to the degree of initial responsibility given to a new employee, also for the possibility of jobs with a higher degree of responsibility.

6. The competency certificate provides adequate information for placing an employee into in-plant training programs.	(5)	4	3	2	1

Comments: This documentation would assist me in knowing what degree of progress should be expected from a new employee, especially in the (on the job training) program.

7. The competency certificate provides sufficient information to reveal the job qualifications of an applicant:	(5)	4	3	2	1

Comments: Yes as far as requisites for the job - performance on the job normally reflects the employees past training, if good - will continue on the job. However, there may be exceptions.

8. The items listed on the competency certificate can be adequately measured by an instructor.	(5)	4	3	2	1

Comments: Yes, especially if a written evaluation and review of the students documented progress is completed prior to recording the information on the certificate.

9. It is important for instructors to issue competency certificates for the purpose of aiding students in obtaining full-time job placement.	(5)	4	3	2	1

Comments: Yes, if it is issued with a thorough representation of the students skills. It also represents achievement by the student in a specific area or areas.

10. It is important for instructors to issue competency certificates for the purpose of aiding employers in selection of qualified personnel.	(5)	4	3	2	1

See comments for items 2, 3, 4, 5, & 6.

PART II
Improving the Competency Certificate

Directions: This part is intended to identify changes that might improve the competency certificate. You will need to refer to the reverse side of the certificate while responding to the following items. Please check the most appropriate response.

1. Do the competency areas on the certificate appear to be the areas of major importance for the vocational program area?

   ✓ Yes

   ___ No, major areas are left out.

   ___ No, areas of minor importance are included.

2. Are the areas clearly defined?

   ✓ Yes

   ___ No

3. Should the certificate list occupations for which the student has been trained instead of the content areas mastered?

   ___ Yes, list occupations only.

   ___ No, list content areas only.

   ✓ Both, list content areas and occupations.

4. Should the certificate indicate if the student has received on-the-job training?

   ✓ Yes

   ___ No

5. Is the rating scale clearly defined?

   ✓ Yes

   ___ No

6. Are the four levels of the rating scale appropriate?

   ✓ Yes

   ___ No, Too many levels

   ___ No, not enough levels

7. Please write any other comments you have regarding changes you feel would improve the usefulness of the competency certificate.

Written evaluations prior to the presentation of the certificate is very important- Students view certificate as a sign of achievement,

and rightfully so.- However, the ratings on the certificate clearly reflect the students proficiency in each area. Evaluations will assist students to improve their ratings if instructors use proper intervals.

BIBLIOGRAPHY

American Vocational Association. Vocational Instruction. 1980 Yearbook. Arlington, Virginia: The American Vocational Association, Inc., 1979.

Consortium on Employment for Education. "Quality Assurance in the Preparation of Youth for Work." Washington, D. C.: 1981, p. iii.

Dale, Oliver J. "Measuring Student Competencies." American Vocational Journal, LIII (January, 1978), 48. ERIC EJ 175 167.

Maryland State Department of Education. "What is Competency-Based Vocational Education (CBVE)?" Cresaptown, Maryland: Western Maryland Vocational Resource Center, 1978. (Pamphlet.)

Nelson, Valerie I., and Roberta A. Ujakowich. "Existing Certificates and a Proposal for CETA. Final Report, September 1979 through February 1980." Washington, D. C.: Office of the Assistant Secretary for Policy Evaluation and Research, January, 1980. ERIC ED 194 815.

Oklahoma State Department of Vocational Technical Education. 1983 Accountability Report and 1985 State Plan. Stillwater, Oklahoma: 1984, Sec. 4, 17.

Oklahoma State Department of Vo-Tech. "Information on Vocational and Technical Education: School Year 1983-84." Stillwater, Oklahoma: Oklahoma State Department of Vo-Tech, 1984. (Pamphlet.)

Patton, Bob. Personal interview. May 29, 1984.